INDEX Covering the Principal Subjects and Articles Which Appeared in Volume 29 of WIRE AND WIRE PRODUCTS from January to December, 1954, Inclusive

Allowable Working Stresses or Springs by H. C. R. Carlson 1318
Annealing and Patenting with Salt Baths by L. B. Rosseau 399
Annealing and Strain Relieving in One Salt Bath Furnace 744
Annual Convention of The Wire Association, The by E. D. Sickels 45
Application of Wire and Cable to a Wire and Cable Plant, The by P. J. Croft 1170
Arc-Welding Electrodes and Their Manufacture by I. G. Fritz 410
Aspects and Advantages of Training in the Wire Industry by H. Armitage 988
Cable, A New Material for—"Hypalon" 636
Cable Paper, Desired Electrical Properties of 754
Cable, New Uses of D.P.R. in 1206
Cable Sheath, Measurement and Control of 1177
Cable, Silicone Insulated 978
Cables, Electric, for Wire and Cable Plants 1170
Cables, Natural and Synthetic Rubbers for 641
California, Impact of Defense Spending on Southern 865
Carbon, Exhaust Nuisance Abatement with Activated 266
Cellular Polyethylene 287
Chromium, Use of, for Machinery Wear Parts 284
Cleaning, Patenting and Coating Continuously 1131
Cleaning of Stainless Steel for Wire Drawing by J. H. Carson 1143
Coating, Patenting and Cleaning Continuously 1131
Coatings of Steel Wire, Phosphate 1440
Coiling Temperature, Effects of, on Hot Rolled Rod .. 1161
Comments on Dr. Saxl's Article on Determination of Wire Tensions 1208
Composite Wires by Electroplating by E. C. Slick .. 1324
Compounding of Electrical Grade Silicone Rubber by R. Lyle 403
Concrete Reinforcement Wire, Prestressing of 1421
Continental Steel Corporation's New High Speed Rod Mill by D. C. Horsman and A. Wilson 261
Continuous Finishing of Copper Rods 1446
Continuous Patenting, Cleaning and Coating by D. K. White 1131
Continuous Wire Drawing and Packaging by H. W. Richardson 1430
Cooling of Steel Wire During Continuous Drawing by N. A. Wilson 1160
Copper Rod Mill with Continuous Finishing, A New 1446
Copper Wire, Electrotinning of 1427
Descaling, Mechanical, of Rods 501
Desired Electrical Qualities of High Voltage Cable Paper, The by W. A. DelMar 754
Determination of Correct Wire Tensions by E. J. Saxl 752
Diameter Control in Extrusion of Wire Coatings 401
Die Making by the Electrical Discharge Machining Process by H. V. Harding 1434
Die Measurement and Inspection by J. G. Wistreich 515
Die Wear in Dry Drawing of Ferrous Wires 746
Discussion on Precision Spring Design by M. G. Fangemann
Part I 152
Part II 267
Part III 394
DPR—New Uses in Cable and Communications by M. E. Doane 1206
Drawing Ferrous Wires Dry, Causes of Die Wear in .. 746
Drawing Speed, Effect on Stainless Steel Properties .. 522
Drop Wire, Neoprene Jacketed Telephone 860
Dry Blending of Plastics 1204
Economy of Shaped Wire, The by E. H. Mann 391
Effects of Coiling Temperature on Hot Rolled Rod, The by R. A. Stebbins 1141
Effect of Heat-Treatment on the Magnetic Properties of Cold Worked 18/8 by S. Storchheim 147
Electrodes, the Manufacture of Arc-Welding 410
Electroplating to Produce Composite Wires 1324
Electrotinning of Copper Wire from the Stannous Fluoborate Bath by A. E. Carlson 1427
Enamels, Formvar, the Solvent Resistance of 1435
Evaluation of Natural and Synthetic Rubbers for Insulated Wires and Cables by V. Siegfried and W. G. Dahlstrom 641
Exhaust Nuisance Abatement with Activated Carbon by K. B. Magee 266
Extrusion Control by F. E. Planer 401
Fatigue Properties of Music Wire & Springs Summary of report furnished by the National Bureau of Standards 64
Flattening Wire 857-951
Formvar Enamels, the Solvent Resistance of 1435
Galvanized Steel Wire, Effects of Pre-Plating 633
Government Wire Production Information 66-171-292-413-649-762-995-1209-1337-1448
Heat Aging Characteristics of Insulating Varnishes by H. I. Morgan and K. N. Mathes 967
Heat Treatment, Effects on Cold Reductions 18-8 1327
Heat Treatment, Effects on Magnetic Properties of 18-8 147
High Carbon Commodity Wire-Practice and Control for Manufacture of 625
"Hypalon" Chlorosulfonated Polyethylene a New Material for the Wire and Cable Industry by F. W. Keeley and I. D. Roche 636
Impact of Changes In Defense Spending on Southern California Industry, The by L. B. Perry 865
Impact of Current Economic Conditions on the Wire Industry, The by E. C. Van Syckle 739
Impressions of the U. S. by M. Bonzel 758
Importance of Lime in Wire Drawing, The by T. C. Miller 843
Inspection and Measurement of Dies 515
Insulated Cable, Silicone 516-978
Insulated Wire, Rubber 162
Insulated Wire, Covered with Kel-F 992
Insulating Varnishes, Heat Aging Characteristics of .. 967
Insulations-Rigid and Semi-Rigid 1331
Johnson Steel and Wire Company Modernization Program 975
Lime, Importance of in Wire Drawing 843
Machining Dies by Electrical Discharge Process 1434
Manufacture of Rivets and Screws, The by T. S. Merriman 159
Manufacturer's Wire by R. R. Tatnall 629
Measurement and Inspection of Dies 515
Mechanical Descaling of Rods 501
Music Wire, Fatigue Properties of 64
Natural Aging of Neoprene Jacketed Telephone Drop Wire by R. H. Dudley and C. A. Larson 860
Neoprene Jacketed Telephone Drop 860
New Copper Wire Rod Mill with Continuous Finishing, A by L. Bournez 1446
New Process for Wire Drawing, Packaging, Handling and Dispensing, A 273
Observations on the Effects of Pre-Plating Hot Galvanized Steel Wire by H. H. Passolt and A. T. Baldwin 632
Opinion vs. Fact in the Wire Industry by A. U. Sternlof 639
Outstanding Personalities of the Wire Industry 75-180-300-421-535-655-768-881-1002-1218-1344-1454

Packaging Wire, A New Process for 273
Packaging Wire and Drawing, Continuously 1430
Paper, Cable, Desired Electrical Properties of 754
Patenting and Annealing in Salt Baths 399
Patenting, Cleaning and Coating, Continuous 1131
Patents, Wire 83-186-311-431-545-664-774-889-1013-1228-1352-1461
Phosphate Coatings in the Cold Drawing of Steel Wire by J. F. Leland 1440
Plastic Compounds, Dry Blending of 1204
Polyethylene Cable Sheath, Measurement and Control of 1177
Polyethylene, Cellular 287
Polyethylene, "Hypalon", A New Material for Wire and Cable 636
Polymonochlorotrifluoroethylene Insulation for Wire 992
Practical Analysis of the Causes of Die-Wear in the Dry-Drawing of Ferrous Wires, A by E. P. Riley-Gledhill 746
Practice and Control for the Manufacture of High Carbon Commodity Wire by R. H. Isenberg 625
Pre-Plating-Effects of on Galvanized Steel Wire 632
Prestressing Wires-Stress-Relaxation and Stress Corrosion Up To Date by G. T. Spare 1421
Processing of Wire Products in Salt Bath Furnaces by L. B. Rosseau 1150
Progress of Mechanical Descaling of Rods for Wire Drawing, The—A Symposium by G. Feeson, H. J. Godfrey, A. E. Harper, A. Hedman, W. A. Smigel, S. L. Stalson and C. F. Wickwire 501
PVC Insulations, Rigid and Semi-Rigid 1331
Quality—A Combination of Horsesense and Statistical Methods by C. K. Hamlin 852
Quality Control in the Wire Industry 639
Quality Control in the Wire Industry by A. U. Sternlof 1315
Reminiscings of an Old-Timer by C. D. Johnson 31
Reply to a Criticism of the Increasing Load Wire Abrasion Tester, A, by H. T. McLean 169
Response to Heat Treatment of 18/8 Wires Given Various Percent Cold Reductions, The by S. Storchheim 1327
Results of Research on Rubber Insulated Wire by J. T. Blake 162
Review of Recent Wire Patents, A 83-186-311-431-545-664-774-889-1013-1228-1352-1461
Rigid and Semi Rigid PVC Insulations by J. L. Foster 1331
Rivets, Manufacture of 159
Rod, Hot Rolled-Effects of Coiling Temperature on 1141
Rod Mill, Continental Steel Corporation's New 261
Rod Mill With Continuous Finishing, A New Copper 1446
Rods, Mechanical Descaling of 501
Rubber Insulated Wire, Results of Research on 162
Rubber Silicone, Compounding of 403
Rubber, Silicone, for Insulation of Cable 516
Rubbers, Natural and Synthetic for Wire and Cable 641
Rural Distribution Wire by C. C. Lawson 512
Salt Bath Furnace, Annealing and Strain Relieving in One 744
Salt Bath Furnaces, Processing Wire Products in 1150
Salt Baths, Annealing and Patenting in 399
Screws, Manufacture of 159
Shaped Wire, Economy of 391
Silicone Insulated Cable Practice by H. T. Armitt 978
Silicone Rubber as Cable Insulation by F. J. Dexter and P. C. Servais 516
Silicone Rubber, Compounding Electrical Grades 403
Solution Heat Treating, Annealing and Strain Relieving in One Salt Bath Furnace by T. H. Atkinson and W. P. Thompson 744
Solvent Resistance of Formvar Enamels 1435
Some Controversial Points on Dry Blending by M. S. Greenhalgh 1204
Spring Design, Discussions of 152-267-374
Springs, Allowable Working Stresses for 1318
Springs, Fatigue Properties of 64
Stainless Steel, Cleaning of, for Wire Drawing 1143
Stainless Steel, Effects of Heat Treatment on Magnetic Properties 147
Stainless Steel Wire, Effects on Heat Treatment on Cold Reductions 1327
Stainless Steel Wire Properties Are Affected by Draw Speed by S. Storchheim 522
Statistical Methods of Securing Quality 852
Status of Polymonochlorotrifluoroethylene Insulated Wire by L. A. Walters 992
Steel Wire, Coating of During Continuous Drawing 1160
Steel Wire, Phosphate Coating of 1440
Steel Wire, Uses Growing 1336
Study of the Solvent Resistance of Formvar Enamels by J. A. Loritsch 1435
Successful Regional Meeting Held in California 863
Target for '54 by L. B. Worthington 42
Tensions, Wire, Determination of Correct 752
Tensions, Wire, Comments on 1208
Tester, Wire Abrasion-Comments on 169
Thickness Measurement and Control in the Manufacture of Polyethylene Cable Sheath by W. T. Eppler 1177
Tinning, Electro, of Copper Wire 1427
Training in the Wire Industry 988
Use of Industrial Hard Chromium on Wire Machinery Wear Parts, The, by W. Schmidt 284
Uses of Steel Wire Growing by K. F. Maxey, Jr. 1336
Varnishes, Heat Aging Characteristics of Insulating 967
Wear Parts of Wire Machinery, Use of Chromium on 289
Wire Association, Annual Convention of, in 1953 45
Wire Association-Proceedings of the November, 1953 Annual Convention 49
Wire Association Regional Meetings:
Los Angeles 863
Worcester 646
Wire Abrasion Tester, Reply to Criticism on 169
Wire Association Special Section 1185-1201
Program of The Annual Convention of The Wire Association 1187-1190
The Wire Association History by K. B. Lewis 1194
Changes in Twenty-Five Years by E. D. Sickels 1198
Wire and Cable, Application of, to a Wire and Cable Plant 1170
Wire and Cable Symposium 407
Wire, Coating of, During Continuous Drawing 1160
Wire, Copper, Electrotinning of 1427
Wire Drawing, Continuous, and Packaging 1430
Wire Drawing, Use of Lime in 843
Wire Drawing, Packaging and Dispensing, New Process for 273
Wire Fatigue, Properties of 64
Wire Flattening, An Appraisal of Today's Theory and Practice, by A. I. Nussbaum, Part 1 Theory 857
Part II Practice 961
Wire, Galvanized Steel-Effects of Pre-Plating on 632
Wire, High Carbon-Practice and Control for Manufacture of 625
Wire Industry, Aspects and Advantages of Training in the 988
Wire Industry, Impact of Current Conditions on 739
Wire Industry, Quality Control in 639-852-1315
Wire Industry, The, in the U.S. 758
Wire, Manufacturer's 629
Wire Outlook, The 29-145-259-389-499-623-737-841-959-1129-1313-1419
Wire, Prestressing Concrete Reinforcement 1150
Wire, Rubber Insulated 162
Wire, Rural Distribution 473
Wire, Shaped, Economy of 391
Wire, Stainless Steel, Effects of Drawing on Properties 522
Wire, Stainless Steel, Effects of Heat Treatment on Magnetic Properties 147
Wire, Steel, Phosphate Coating of 1440
Wire Steel, Uses Growing 1336
Wire, Telephone Drop, Neoprene Covered 860
Wire Tensions, Comments on 1208
Wire Tensions, Correct Determination of 752
Wires, Composite, by Electroplating 1324
Worcester Regional Meeting of The Wire Association 646
Working Stresses for Springs 1318

AUTHORS—Contributing the Leading Articles to WIRE AND WIRE PRODUCTS During the Year, 1954

ARMITAGE, H. Staff School Instructor
Frederick Smith & Co. Ltd.
Halifax, England

ARMITT, H. T., Research Lab.
The Okonite Company
Passaic, N. J.

ATKINSON, T. H., Gen'l Maintenance Super.
Townsend Company
New Brighton, Pa.

BALDWIN, A. T. Mgr. of Flux Sales
Hanson Van-Winkle Munning Company
Matawan, N. J.

BLAKE, JOHN T., Dir. of Research
Simplex Wire & Cable Company
Cambridge, Mass.

BONZEL, MAURICE, President
Ets., Trefileries Bobin
Issy les Molineaur (Seine), France

BOURNEZ, LUCIEN, Project Engineer
Loewy Rolling Mill Division
Hydropress Inc.
New York, N. Y.

CARLSON, A. E., Eng. Service Lab.
General Chemical Div.
Allied Chemical & Die Corp.
Edgewater, N. J.

CARLSON, HAROLD C. R., P. E.
Consulting Engineer
The Carlson Company
New York, N. Y.

CORSON, JOHN H., Mgr. Metallurgial Lab.
Carpenter Steel Company
Reading, Pa.

CROFT, PHILIP J., Chief Engineer
Canada Wire & Cable Company Ltd.
Toronto, Ont., Canada

DAHLSTROM, WALTER G., Div. Research Eng.
Electrical Cable Div.
American Steel & Wire Div.
United States Steel Corp.
Worcester, Mass.

DEL MAR, WILLIAM A., Chief Eng.
Habirshaw Div.
Phelps Dodge Copper Products Corp.
Yonkers, N. Y.

DEXTER, J. F.
Dow Corning Corp.
Midland, Mich.

DOANE, MALCOLM E.
H. V. Hardman Company Laboratory
Belleville, N. J.

DUDLEY, R. H., Chief Chemist
Whitney Blake Co.
New Haven, Conn.

EPPLER, WALTER T., Engineer
Cable Sheath Extrusion Development
Western Electric Company
Kearny, N. J.

FANGEMANN, M. GERALD, General Manager
John Chatillon and Sons
New York, N. Y.

FOSTER, J. L., Product Engineer
Plastic Materials
B. F. Goodrich Chemical Company
Cleveland, Ohio

FRITZ, I. G., Dip Eng.
translated by Dr. Jerome W. Howe
Worcester, Mass.

GREENHALGH, MILTON S., Supervisor
Thermoplastic Insulation Unit
C M Laboratory
General Electric Company
Bridgeport, Conn.

HAMLIN, C. KENNETH, Quality Control Dept.
Rome Cable Corp.
Rome, N. Y.

HARDING, H. V., Tech. Asst. to the President
Elox Corporation of Michigan
Clawson, Mich.

HIGGINS, W. T., Devel. Dept.
Bakelite Company
Div. Union Carbide & Carbon Corp.
New York, N. Y.

HORSMAN, D. C., Supt. Steel Div.
Continental Steel Corp.
Kokomo, Ind.

ISENBERG, ROBERT H., Metallurgical Engineer
Pittsburgh Steel Company
Monessen, Pa.

JOHNSON, CHARLES D.
Worcester, Mass.

KEELEY, F. W.
Rubber Chemicals Div.
E. I. Dupont deNemours & Company
Wilmington, Del.

LARSON, C. A., Rubber Chemist
Whitney Blake Company
New Haven, Conn.

LAWSON, CLEMENT C., Wire Dev. Eng.
Bell Telephone Laboratories Inc.
Murray Hill, N. J.

LELAND, JAMES F., Research Dev. Eng.
Parker Rust Proof Company
Detroit, Mich.

LORITSCH, J. A., Manager
Alkyd Products Engineering
Chemical Materials Division
General Electric Company
Schenectady, N. Y.

LYLE, R., Chemical Division
General Electric Company
Waterford, N. Y.

McLEAN, H. T.
Material & Processing Division
General Engineering Laboratory
General Electric Company
Schenectady, N. Y.

MAGEE, KEVIN B., Consulting Engineer
Danbury, Conn.

MANN, EMMETT H., Sales Manager
Alloy Metal Wire Company Inc.
Prospect Park, Pa.

MATHES, K. N.
General Electric Company
Schenectady, N. Y.

MAXCY, KENNETH F., Jr.
Pittsburgh Steel Company
Pittsburgh, Pa.

MERRIMAN, T. S., Metallurgist & Process Engr.
Waterville Division
Scovill Manufacturing Company
Waterville, Conn.

MILLER, THOMAS C., Technical Director
Industrial Sales Division
National Gypsum Company
Buffalo, N. Y.

MORGAN, H. I.
General Electric Company
Schenectady, N. Y.

NUSSBAUM, A. I.
Rolling Mill Division
Stanat Manufacturing Company
Long Island City, N. Y.

PASSOLT, HENRY H., Chief Metallurgist
Johnson Steel & Wire Company
Worcester, Mass.

PERRY, DR. LOUIS B.
Associate Professor Economics
Pomona College
Claremont, Calif.

PLANER, DR. F. E., B.Sc., M.Sc.
London, England

RICHARDSON, WILLIAM H., Vice President
The Driscoll Wire Company
Shelton, Conn.

RILEY-GLEDHILL, Esq., E.P.
Standard Wire Company, Ltd.
Sowerby Bridge, England

ROCHE, I. D.
Rubber Chemicals Division
E. I. duPont deNemours & Company
Wilmington, Del.

ROSSEAU, LEON B., Vice President
Ajax Electric Company
Philadelphia, Pa.

SAXL, DR. ERWIN J.
Tensitron Inc.
Harvard, Mass.

SCHMIDT, WARREN, President
City Plating Works Inc.
Bridgeport, Conn.

SERVAIS, P. C.
Dow Corning Corp.
Midland, Mich.

SICKELS, EDMUND D., Editor
Wire and Wire Products
Stamford, Conn.

SIEGFRIED, VICTOR, Chief Research Eng.
Electrical Cable Division
American Steel & Wire Division
United States Steel Corp.
Worcester, Mass.

SLICK, EDWARD C., Supervisor
Product Engineering—Parts Division
Sylvania Electric Products Inc.
Warren, Pa.

SPARE, GORDON T., Research Project Engr.
American Steel & Wire Division
United States Steel Corp.
Cleveland, Ohio

STEBBINS, ROBERT A., Asst. Supt.
Rod and Mill Division
Bethlehem Steel Division
Johnstown, Pa.

STERNLOF, AXEL U., Division Product Eng.
Quality Control—Electrical Cable Works
American Steel & Wire Division
United States Steel Corp.
Worcester, Mass.

STORCHHEIM, SAMUEL, Engineer in Charge
Atomic Energy Division
Sylvania Electric Products Corp.
Bayside, L. I., N. Y.

TATNALL, RODMAN R.
Field Service Metallurgist
Colorado Fuel & Iron Corporation
Wickwire Spencer Steel Division
Buffalo, N. Y.

THOMPSON, W. PAUL, Dir. of Quality Control
Townsend Company
New Brighton, Pa.

VAN SYCKLE, E. C.
Manager of Manufacturers Wire Sales
Pittsburgh Steel Company
Pittsburgh, Pa.

WALTERS, L. A., Director of Research
The Rex Corporation
West Acton, Mass.

WHITE, DONALD K., Foreman No. 2 Wire Mill
John A. Roebling's Sons Corp.
Sub. of The Colorado Fuel and Iron Corp.
Trenton, N. J.

WILSON, A., Chief Roll Designer
United Engineering & Foundry Company
Pittsburgh, Pa.

WILSON, NORMAN A., Asst. Dir. of Research
Morgan Construction Company
Worcester, Mass.

WISTREICH, M.Sc., D.I.C. A.M.I., Mech. Eng.
Head of Metal Working Laboratory
Bristol Iron and Steel Research Assoc.
London, England

WORTHINGTON, LESLIE B., Pres.
United States Steel Supply Div. of
United States Steel Corp.
Chicago, Ill.